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EDITOR'S NOTE

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PROCEEDINGS AND ORDERS DATE: 111386

CASE NBR 86-1-00143 CMY
SHORT TITLE Mustafa, Karim A. DOCKETED: Jul 31 1986
VERSUS United States

Date	Proceedings and Orders
Jul 31 1986	Petition for writ of certiorari filed.
Sep 2 1986	Order extending time to file response to petition until September 29, 1986.
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Oct 14 1986	Brief of respondent United States in opposition filed.
Oct 15 1986	DISTRIBUTED. October 31, 1986
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Nov 10 1986	Petition DENIED. Dissenting opinion by Justice White with whom Justice Brennan joins. (Detached opinion.)

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PETITION FOR WRIT OF CERTIORARI

No. 86-143

Supreme Court, U.S.
FILED
JUL 31 1986
SPANIOL, JR.
CLERK

In the Supreme Court of the United States

OCTOBER TERM, 1985

KARIM ABDUL MUSTAFA
(A/K/A JOSEPH N. BROWN, JR.)
SPECIALIST FOUR, UNITED STATES ARMY,
PETITIONER

v.

THE UNITED STATES OF AMERICA,
RESPONDENT

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF MILITARY APPEALS

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3112

QUESTIONS PRESENTED

1. WHETHER admission of expert testimony based on a novel scientific technique requires a showing that the technique meets the *Frye* test, *i.e.*, there is general acceptance in the scientific community of the technique.
2. WHETHER the new scientific technique of blood splatter analysis has been established as generally accepted in the scientific community.

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In the Supreme Court of the United States

OCTOBER TERM, 1985

No. _____

KARIM ABDUL MUSTAFA
(A/K/A JOSEPH N. BROWN, JR.)
SPECIALIST FOUR, UNITED STATES ARMY,
PETITIONER

v.

THE UNITED STATES OF AMERICA,
RESPONDENT

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF MILITARY APPEALS

The petitioner, Karim Abdul Mustafa, respectfully prays that a writ of certiorari issue to review the judgment and opinion of the United States Court of Military Appeals entered in this proceeding.

OPINIONS BELOW

The opinion of the Court of Military Appeals is reported at 22 M.J. 165 (C.M.A. 1986) (Appendix A). The opinion of the Army Court of Military Review is unpublished, CM 443380 (A.C.M.R. 30 Nov. 1984) (Appendix B).

JURISDICTION

The judgment of the Court of Military Appeals was entered on June 2, 1986, affirming petitioner's conviction dated July 1, 1982. The jurisdiction of the Court is invoked under 28 U.S.C. § 1259.

STATEMENT OF THE CASE

On the morning of February 13, 1982, the body of a young German female was found at the base of a stairwell in the American housing area at Aschaffenburg, Germany. The

victim had been raped, sodomized, and stabbed thirteen times. Petitioner and another soldier were convicted of the rape, sodomy, and premeditated murder of the young woman.

At petitioner's trial, the government called Special Agent (SA) James Herndon of the Army Criminal Investigation Command (CID) as an expert witness. Over defense objection, the military judge ruled SA Herndon to be an expert in the field of blood flight pattern analysis (R. 244). Special Agent Herndon's experience in this area included attendance at a five-day seminar taught by the originator of blood splatter analysis, Professor Herbert L. MacDonell[1] and an unspecified amount of training in this area from CID schooling and practical experience as an investigator (R. 234-236).

In his testimony, SA Herndon explained that blood splatter analysis would answer such questions as (1) where the injury occurred, (2) the velocity of the instrument upon impact, (3) the angle of the instrument upon impact to show the direction of travel, and (4) the type of instrument used to inflict the injury (R. 235). He proceeded to describe the bloodstains he viewed near and at the area where the victim was found. He used such terms as "impact," "cast-off," "medium velocity," and "transfer" to describe the bloodstains found on the ground, and on the walls and steps of the stairwell (R. 247-252). He also testified that there was a trail of blood between the stairwell and several bloodstains located on the street around the corner from the stairwell (R. 246).

From his observations of the blood splatters SA Herndon theorized as to the events that resulted in the victim's death. He opined that the victim was initially accosted on the street and stabbed at that point (R. 247). She was then taken around the corner to the stairwell where she struggled and was again stabbed near the top of the stairwell (R. 247-248). The bleeding from her wounds accounted for the bloodstains found on the lower steps as she was led down to the bottom of the stairwell (R. 250). Finally, the victim was stabbed several

[1] The course consisted of lectures, written materials and experiments, all based on MacDonell's research (R. 234, 237, 240).

times while in a prone position on the stairwell's floor (R. 251). The prosecution used this scenario to argue that the killing was premeditated (R. 509-514).

Petitioner was found guilty of all charged offenses and sentenced to be put to death. On November 23, 1984, the Army Court of Military Review affirmed the findings except for the finding of guilty to felony murder which was held multiplicious with premeditated murder. The Army court also found the sentence to death to have been improperly imposed and substituted therefor confinement at hard labor for life, a dishonorable discharge and forfeiture of all pay and allowances.

The questions presented in this petition have been fully litigated at every stage of the appellate process. The issue specified by the United States Court of Military Appeals, as a prerequisite to the Court's jurisdiction, was as follows:

> WHETHER UNDER MIL. R. EVID. 702, EXPERT TESTIMONY IS ADMISSIBLE AS TO FLIGHT PATTERNS OF BLOOD AND THEIR IMPLICATIONS.

REASONS FOR GRANTING THE WRIT

For more than half a century, the admissibility of scientific evidence through expert testimony in most federal courts has been determined by the application of the standard enunciated in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923) [hereinafter referred to as the *Frye* test]. *Frye* imposed the requirement that a scientific technique must be shown to be generally accepted by the relevant scientific community before it receives judicial recognition.[2] Since the enactment

[2] The *Frye* test is based on the following oft-quoted passage:

> Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.

Frye v. United States, 293 F. at 1014.

of the Federal Rules of Evidence in 1975, however, the viability of the *Frye* test has been a matter of great uncertainty in the federal circuit courts. A few courts have interpreted the broader language of Fed. R. Evid. 702,[3] and the silence in the legislative history with respect to the *Frye* test, as an abrogation of the *Frye* standard.[4] However, the majority of the circuit courts have either expressly retained the *Frye* test[5] or implicitly retained *Frye* by their continued application of the "general acceptance" standard to the admission of scientific evidence.[6] The instant petition presents the Court with the opportunity to resolve the conflict among the federal circuit courts as to the proper standard to be applied in determining the admissibility of novel scientific techniques.

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[3] Fed. R. Evid. 702 states in whole:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

In the instant case, the Court of Military Appeals applied Mil. R. Evid. 702, which is taken from the federal rule verbatim.

[4] *See* United States v. Ferri, 778 F.2d 985, 988 (3d Cir. 1985), *cert. denied*, 54 U.S.L.W. 3809 (U.S. June 10, 1986) (No. 85-6536); United States v. Gould, 741 F.2d 45, 49 (4th Cir. 1984) (applied a less stringent standard of "substantial acceptance" as the foundational test of relevance for scientific evidence); United States v. Baller, 519 F.2d 463, 465-466 (4th Cir. 1975), *cert. denied*, 423 U.S. 1019 (1975).

[5] *See* United States v. Shorter, 618 F. Supp. 255, 257 n.3 (D.C.D.C. 1985); Barrel of Fun, Inc. v. State Farm Fire and Cas. Co., 739 F.2d 1028, 1031 n.9 (5th Cir. 1984). *Cf.* United States v. McBride, 786 F.2d 45, 49 (2d Cir. 1986) (Fed. R. Evid. 702 interpreted to incorporate the *Frye* test).

[6] *See* United States v. Metzger, 778 F.2d 1195, 1203-1204 (6th Cir. 1985), *cert. denied*, 54 U.S.L.W. 3840 (1986); United States v. Smith, 776 F.2d 892, 898 (10th Cir. 1985); United States v. Solomon, 753 F.2d 1522, 1526 (9th Cir. 1985); United States v. Lewellyn, 723 F.2d 615, 619 (8th Cir. 1983); United States v. Tranowski, 659 F.2d 750, 757 (7th Cir. 1981); United States v. Brady, 595 F.2d 359, 362-363 (6th Cir. 1979), *cert. denied*, 444 U.S. 862 (1979); United States v. Fosher, 590 F.2d 381, 383 (1st Cir. 1979); United States v. Kilgus, 571 F.2d 508, 510 (9th Cir. 1978).

1. THE *FRYE* TEST SHOULD CONTINUE TO BE THE STANDARD FOR ADMISSION OF NOVEL SCIENTIFIC TECHNIQUES.

A courtroom is not a research laboratory. To prevent triers of fact from being misled by unreliable scientific evidence, the *Frye* test serves three important functions. First, it "assures that those most qualified to assess the general validity of a scientific method will have the determinative voice." *United States v. Addison*, 498 F.2d 741, 744 (D.C. Cir. 1974). Requiring acceptance by the scientific community precludes reliance on those few who are convinced of the efficacy of their particular methodology.

Second, since scientific proof may assume a posture of mystic infallibility in the eyes of laymen, the ability to produce rebuttal experts, equally conversant with the mechanics and methods of a particular technique, may be crucial. *See United States v. Metzger*, 778 F.2d at 1205; *United States v. Addison*, 498 F.2d at 744. Thus, the *Frye* test protects both prosecution and defense alike by assuring the existence of a minimal reserve of experts who can critically examine the validity of a scientific determination. *Addison*, 498 F.2d at 744. As the Fourth Circuit Court of Appeals has stated:

> [I]t is difficult to rebut . . . an opinion [that claims a scientific basis] except by other experts or by cross-examination based on a thorough acquaintance with the underlying principles. In order to prevent deception or mistake and to allow the possibility of effective response, there must be a demonstrable, objective procedure for reaching the opinion and qualified persons who can either duplicate the result or criticize the means by which it was reached, drawing their own conclusions from the underlying facts.

United States v. Baller, 519 F.2d at 466 (citations omitted). A criminal defendant's fate should not depend on his ability to successfully rebut scientific evidence when, in reality, the witness is testifying "on the basis of an unproved hypothesis

in an isolated experiment which has yet to gain general acceptance in its field." *United States v. Brown*, 557 F.2d 541, 556 (6th Cir. 1977).

Finally, the *Frye* test safeguards against the possible prejudicial effect of expert testimony based upon an unproven scientific hypothesis. "[U]nreliable scientific testimony creates a serious and unjustifiable risk of an erroneous verdict, and . . . *the adversary process at its best does not remove this risk.*" *Barefoot v. Estelle*, 463 U.S. 880, 931 n. 10 (1983) (Blackmun, J., dissenting) (emphasis added).

The *Frye* test was not rendered obsolete by the enactment of the Federal Rules of Evidence. Its continued application by the majority of the federal circuit courts supports the interpretation that Fed. R. Evid. 702 incorporates the *Frye* standard.

Reliability depends upon three factors: (1) the validity of the underlying principle; (2) the validity of the technique applying the underlying principle; and (3) the proper application of the technique on a particular occasion.[7] Determination of the first two factors may be streamlined by judicial notice where the reliability of the principle and procedure is not subject to reasonable dispute. However, where a novel scientific technique is at issue, the *Frye* test provides the standard for assessing its reliability.[8] More importantly, the *Frye* test prevents the courtroom from being turned into a scientific testing ground for new hypotheses and novel techniques. The need for the *Frye* test is as compelling now as it was some fifty years ago. The failure of the Court of Military Appeals to apply the *Frye* test in the instant case was error.

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[7] *See* Giannelli, *The Admissibility Of Novel Scientific Evidence: Frye v. United States, A Half-Century Later*, 80 Colum. L. Rev. 1197, 1200-1201 (1980).

[8] Rule 702 may have broadened the types of evidence admissible, but the standard of reliability for *scientific* evidence (as opposed to "technical" or "specialized knowledge") has not been relaxed. United States v. Metzger, 778 F.2d at 1205 (where the evidence at issue was not scientific evidence, a showing of general acceptance in the particular field was not required).

II. BLOOD SPLATTER ANALYSIS IS A NOVEL SCIENTIFIC TECHNIQUE THAT HAS NOT GAINED GENERAL ACCEPTANCE IN THE FORENSIC SCIENTIFIC COMMUNITY.

The issue of the admissibility of blood splatter analysis is one of first impression in the federal courts[9] and has only been addressed by a handful of state courts.[10] Thus, this new methodology of investigation has been subject to little judicial attention, and certainly has not received widespread judicial recognition as a sufficiently reliable scientific technique to be admissible in the truth-finding process.

The study of blood pattern characteristics was developed in 1971 by a criminologist, Professor Herbert MacDonell. Under a grant from the Law Enforcement Assistance Agency,

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[9] However, without addressing the merits of the issue, the Eighth Circuit Court of Appeals, in Hall v. Iowa, 705 F.2d 283 (8th Cir. 1983), *cert. denied*, 464 U.S. 934 (1983), upheld the denial of the habeas corpus petition challenging the admission of expert testimony on blood splattering as an evidentiary matter that did not rise to the level of a due process violation nor otherwise implicate constitutional rights. *Id.*, 705 F.2d at 287.

[10] Expert testimony on blood splattering has been admitted in six jurisdictions. *See* People v. Knox, 459 N.E.2d 1077 (Ill. App. 1984) (*but see* People v. Driver, 379 N.E.2d 840 (Ill. App. 1978)); State v. Hall, 297 N.W.2d 80 (Iowa 1980) (en banc), *cert. denied*, 450 U.S. 927 (1981); State v. Satterfield, 592 P.2d 135 (Kan. 1979); State v. Graham, 422 So.2d 123 (La. 1982), *appeal dismissed*, 461 U.S. 950 (1983); Farris v. State, 670 P.2d 995 (Okla. Crim. App. 1983); State v. Melson, 638 S.W.2d 342 (Tenn. 1982), *cert. denied*, 459 U.S. 1137 (1983). A seventh state court reversed a conviction, where the trial judge admitted evidence on blood splattering, on the basis that greater inquiry should have been conducted into the field and the qualifications of the particular witness. State v. Philbrick, 436 A.2d 844 (Me. 1981). The court stated "any relevance [the expert's] opinion may have had to prove the sequential order of the defendant's use of deadly force . . . was greatly outweighed by the prejudicial possibility that the jury was persuaded to disbelieve the defendant's defense on the basis of 'scientific' evidence of *doubtful reliability*." *Id.* at 861 (emphasis added).

he conducted experiments on the flight characteristics of human blood for two years, which he described:

> We subjected blood to various types of impact conditions and velocities, distances falling and spraying, to study basically the pattern produced under known conditions. This gives us a scale of reference like a ruler. We could then use these patterns to compare to a crime scene.[11]

State v. Hall, 297 N.W.2d at 83. His experiments were an attempt to systematically document, interpret and develop procedures and guidelines for the interpretation of blood stain patterns.

According to Professor MacDonell, blood splatter analysis is based primarily on the laws of physics and mathematics. *State v. Hall*, 297 N.W.2d at 83. With the use of his method, the scene of a crime purportedly can be reconstructed. *Farris v. State*, 670 P.2d at 997. This is accomplished by observing and measuring the size and shape of blood patterns found, which help to determine the source of the blood and any movement that might have occurred after the bloodshed began.

Petitioner does not dispute the underlying principle that the manner in which blood splatters and blood patterns are created conform to the laws of physics. It is the validity of the technique that is at issue. The validity of the underlying principle or theory and the validity of the technique *applying* the underlying theory are two separate questions. The Court of Military Appeals confused these two concepts when it determined that blood splatter interpretation is reliable because it "is grounded in established laws of physics and common sense." *United States v. Mustafa*, 22 M.J. at 168. The validity of the underlying theory does not necessarily mean the technique applying the theory is also valid. Thus the bases of

[11] This research was complied into a pamphlet, entitled *Flight Characteristics and Stain Patterns of Human Blood* (Nov. 1971), which was published by the U.S. Justice Department. The pamphlet consists of approximately thirty pages of text and forty-seven pages of graphs and photographs.

blood splatter analysis in physics and common sense only establish the validity of the underlying theory and *not* the reliability of crime scene reconstruction by blood pattern recognition.

Blood splatter analysis is subject to unpredictable variables that render it too speculative to be sufficiently reliable. First and foremost, it is dependent on the skill of the particular examiner. MacDonell himself recognized this fact in his pamphlet:

> It is the author's opinion that before anyone is qualified to render expert testimony on the significance of bloodstain patterns, they must have conducted a variety of experiments under known conditions using human blood, preserved their results as standards for reference, and have made a detailed study of these standards. Hopefully, they will also have studied this report but it is neither presumed nor suggested that the reading of this document alone will qualify the student as an expert. Those who have carefully examined blood-splatter evidence and/or prepared standards resulting from gunshot impact are aware of the fine detail that cannot be reproduced in any report of this type. Photographic illustrations, for example, must always be a compromise between scope and detail.

MacDonell, *Flight Characteristics and Stain Patterns of Human Blood* 29 (Nov. 1971).[12] The skill of the examiner as an unpredictable variable is one of the factors that renders polygraph analysis[13] unreliable. *See United States v. Williams*, 583 F.2d 1194, 1199 n.9 (2d Cir. 1978) *cert. denied*, 439 U.S. 1117 (1979). Furthermore, as with polygraph analysis, the blood splatter examiner must extrapolate a judgment of something not directly measurable, *i.e.*, the

[12] In the instant case, SA Herndon failed to follow this crucial instruction of developing and using his own standards of reference for interpreting the blood splatters that he examined. Furthermore, he did not account for the surface texture or the weather conditions which are two factors that affect the manner in which blood splatters. *Id.* at 7-8, 27-28.

[13] Polygraph evidence "is not generally believed to be sufficiently reliable in ascertaining truth and deception to justify its utilization in the trial process." United States v. Alexander, 526 F.2d 161,164 (8th Cir. 1975).

events that created the blood splatter. The subjectivity of blood splatter analysis renders the technique too speculative, thereby lacking the requisite indicia of reliability for it to be admissible.

Furthermore, blood splatter analysis fails the *Frye* test because the technique has not been shown to be generally accepted in the scientific community. One man's research does not make a science. Even in a jurisdiction that rejects the *Frye* test, more is required to show reliability than the claim of one expert. The Third Circuit Court of Appeals has noted "it is plain that the proponent [of novel scientific evidence] must make more than a *prima facie* showing (e.g., the testimony of a single qualified expert) that a technique is reliable." *United States v. Downing*, 753 F.2d 1224, 1240 n.21 (3d Cir. 1985).[14] Blood splatter analysis is still in the experimental stage of development. All the knowledge in this area is based on the work of a single researcher. While Professor MacDonell's research may have been spread through the seminars and courses he has given, his experimental findings remain unverified.[15]

Indeed, not only has there been no independent evaluation of his research, but fifteen years after the development of MacDonell's blood splatter analysis, there are only a few purported experts in the field, and those, like SA Herndon in this case, are usually trained by MacDonell. This certainly does not provide the minimal reserve of experts that the *Frye* test guarantees.

While the line that separates those scientific techniques still in the experimental stage from those that have reached the demonstrable stage is a fine one, the study of blood splatter interpretation clearly has not reached the demonstrable

[14] *Cf.* United States v. Brown, 557 F.2d at 557 (application of microprobic analysis to make hair comparisons held not proven to be a generally accepted procedure where the witnesses conceded that their test results had not been duplicated elsewhere and neither was able to cite any authority in the field in support of their positions).

[15] *See* Giannelli, *In Defense of Frye*, in Symposium on Science and Rules and Evidence, 99 F.R.D. 202, 207 (1983).

stage. It has yet to attain general acceptance in the forensic scientific community for it to be judicially recognized as reliable. In the instant case, the government, in the absence of any showing that blood splatter analysis meets the *Frye* test, failed to establish the requisite foundation to render SA Herndon's testimony admissible.

III. THE ADMISSION OF THE BLOOD SPLATTER TESTIMONY OF SPECIAL AGENT HERNDON WAS NOT HARMLESS ERROR.

Expert testimony that is based on scientific evidence has an "aura of special reliability and trustworthiness" to the lay jury. *United States v. Amaral*, 488 F.2d 1148, 1152 (9th Cir. 1973).[16] Since the public holds an exaggerated opinion of the accuracy of scientific evidence, prejudice is inevitable when scientific evidence is improperly admitted. *See Barefoot v. Estelle*, 463 U.S. at 926-927 (Blackmun, J., dissenting). The prejudicial effect of unreliable scientific evidence is widely acknowledged. *Id.* at 926.

> Scientific evidence impresses lay jurors. They tend to assume it is more accurate and objective than lay testimony. A juror who thinks of scientific evidence visualizes instruments capable of amazingly precise measurements, of findings arrived at by dispassionate scientific tests. In short, in the mind of the typical lay juror, a scientific witness has a special aura of credibility.

Id. at 926 n.8 (citation omitted).

In the instant petition, the danger of misleading the court members is especially great. Not only was SA Herndon held out to be an "expert," but his brand of expertise was the ability to recreate the crime for the members. In a complicated murder trial, the testimony of an expert who claims to be able to tell the members exactly how the crime occurred is devastatingly appealing. This type of testimony has the same dangerous potential to mislead jurors as polygraph evidence.

[16] One court has noted that scientific evidence "is likely to be shrouded with an aura of near infallibility, akin to the ancient oracle of Delphi." United States v. Alexander, 526 F.2d at 168.

Blood splatter analysis provides finders of fact with a seductively complete re-creation of the events in question under the auspices of scientific evidence. Testimony based on this type of evidence creates an almost irresistible temptation, on the part of the court members, to abdicate their role in critically assessing *all* the evidence and rely on the expert's theory of the case. The likelihood of an erroneous verdict is increased whenever novel scientific evidence that is unreliable or likely to mislead is admitted. *See United States v. Downing*, 753 F.2d at 1241. Further, SA Herndon's use of blood splatter jargon exaggerated the aura of scientific infallibility of his testimony.

Special Agent Herndon's testimony provided the basis for the prosecution's argument that the killing was premeditated. There is little doubt that the court members gave that testimony undue weight. Therefore, the erroneous admission of his testimony was not harmless error.

CONCLUSION

For the foregoing reasons, including the importance of the evidentiary issue involved, the petition for certiorari should be granted. The questions presented are substantial and of first impression before the Court. Their resolution will be of great significance in setting forth a uniform standard to be applied to the admission of expert testimony based on novel scientific techniques.

Respectfully submitted,

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APPENDICES

APPENDIX A

UNITED STATES COURT OF MILITARY APPEALS

No. 51480.
CM 443380.

UNITED STATES, APPELLEE,

v.

KARIM ABDUL MUSTAFA
(A/K/A JOSEPH N. BROWN, JR.)
SPECIALIST FOUR, UNITED STATES ARMY,
APPELLANT.

June 2, 1986.

For Appellant: *Captain Lorraine Lee* (argued); *Colonel William G. Eckhardt, Lieutenant Colonel William P. Heaston, Major Lawrence F. Klar* (on brief); *Colonel Brooks B. LaGrua, Lieutenant Colonel Paul J. Luedtke, Captain Frank J. DiGiammarino, Captain Robert W. Wiechering.*

For Appellee: *Captain Robert L. Swann* (argued); *Colonel James Kucera, Lieutenant Colonel Adrian J. Gravelle, Major Patrick M. Flachs.*

OPINION OF THE COURT

COX, Judge:

Contrary to his pleas, appellant was convicted by general court-martial with members of premeditated murder, felony murder, rape, forcible sodomy, assault with a means likely to produce grievous bodily harm, and unlawful entry, in violation of Articles 118, 120, 125, 128, and 134, Uniform Code of Military Justice, 10 U.S.C. §§ 918, 920, 925, 928, and 934, respectively. The members sentenced appellant to be put to death, and the convening authority approved the sentence. The Court of Military Review set aside the findings of guilty

to felony murder as being unreasonably multiplicious with premeditated murder, rape, and forcible sodomy, and ordered that Charge and specification dismissed. In light of our opinion in *United States v. Matthews*, 16 M.J. 354 (C.M.A.1983), wherein we held that the capital-punishment sentencing procedures in effect at the time of Matthews' trial were unconstitutional, the court below approved a sentence of dishonorable discharge, total forfeitures, and confinement for life.

We granted appellant's petition for review and ordered briefs on the following modified issue:

> IF EXPERT TESTIMONY IS PROPERLY ADMISSIBLE AS TO FLIGHT PATTERNS OF BLOOD AND THEIR IMPLICATIONS, DID THE MILITARY JUDGE CORRECTLY RULE THAT GOVERNMENT WITNESS HERNDON WAS QUALIFIED UNDER MIL.R.EVID. 702 TO TESTIFY AS AN EXPERT ON THE SUBJECT; AND IF NOT WAS THE ADMISSION OF HERNDON'S TESTIMONY PREJUDICIAL TO ACCUSED?[1]

We also specified the following issue:

> WHETHER UNDER MIL.R.EVID. 702, EXPERT TESTIMONY IS ADMISSIBLE AS TO FLIGHT PATTERNS OF BLOOD AND THEIR IMPLICATIONS.

On the morning of February 13, 1982, a civilian employee of the United States Army found the nude body of a female at the base of a stairwell in the housing area at Aschaffenburg, Germany. There were numerous stab wounds to the body and considerable forensic evidence of sexual assault. Appellant and another soldier were convicted of raping, sodomizing,

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[1] In his petition for grant of review appellant stated the issue as follows:

> WHETHER IT WAS ERROR TO ALLOW THE TESTIMONY OF AN UNQUALIFIED EXPERT WHOSE THEORY OF THE CASE WAS ADOPTED BY THE PROSECUTION AND WHOSE TESTIMONY HAD SUBSTANTIAL PREJUDICIAL IMPACT.

As originally framed by appellant, the issue could only be answered one way. We have restated the issue to allow for deliberation of the facts.

and murdering the victim, a German national. The conviction of appellant's co-actor, Private Roy Gore, has been affirmed by this Court. *United States v. Gore*, 20 M.J. 310 (1985).

Special Agent James Herndon of the Army Criminal Investigation Command (CID) was called as an expert witness in blood-flight analysis to enhance the Government's theory of how the crime occurred. Herndon had attended a seminar on the subject, a 5-day course taught by the preeminent practitioner in the field, Professor Herbert L. MacDonell. This course exposed the students to lectures, written materials, including learned treatises, and experiments. At the conclusion an examination, which Herndon passed, was given to all who attended. Herndon also had an unspecified amount of other training, including CID schooling, and practical experience as an investigator.

Herndon was neither a doctor nor a chemist. He had written nothing on blood flight paths or spatters. He testified that he had applied his training in only one other case, which resulted in the recantation of a claim of robbery.

Over defense objection the military judge declared Herndon to be an expert in the field of blood-flight characteristics. Herndon then described the dried bloodstains found at and near the crime scene. He described the stains using such terms as "impacts," "cast-off," "medium velocity," and "transfer."

The uncontroverted evidence showed that there were blood stains from the victim in three places at or near the crime scene and that she had been stabbed thirteen times in the back, head, neck, and arms. Blood stains were located on a nearby street. A trail of blood drops led from there to the stairwell where massive amounts of blood were found.

Relying on analysis of the trail of blood and its patterns, Herndon testified that it was his opinion that the victim was accosted on the street and wounded at that point. She was taken to the stairwell where the bloodstains indicated that a further struggle occurred. He opined that she had been stabbed again while at or near the top of the staircase, then

dragged to the basement of the stairwell, where additional wounds were inflicted. In essence, the Government adopted this scenario as its theory of the case.[2]

On the foregoing evidence, we hold that the military judge properly determined Herndon to be an expert and correctly allowed him to express his opinions based on that expertise.

Prior to the development of the Federal Rules of Evidence, a party to a federal trial who offered evidence of a scientific nature was required to show that it was "sufficiently established to have gained general acceptance in the particular field in which it belongs." *Frye v. United States*, 293 F. 10113, 1014 (D.C.Cir.1923). This test had its origin in *Frye* and generated considerable litigation as to whether a given field of endeavor was generally accepted. In addition, those parties who called experts were required to show that the potential witnesses were persons of particular training in some field not readily understandable by lay persons. In military courts, the same rules prevailed. Para. 138*e*, Manual for Courts-Martial, United States, 1969 (Revised edition).

Appellant argues that Herndon's area of expertise does not meet the standard of *Frye v. United States, supra*, or even the more liberal standard enunciated in *United States v. Williams*, 538 F.2d 1194 (2d Cir. 1978), *cert. denied*, 439 U.S. 1117, 99 S.Ct. 1025, 59 L.Ed.2d 77 (1979), and that the testimony should have been excluded.[3] He also contends that, even if the subject matter were admissible, Herndon was not qualified to offer his opinions as an expert in the case.

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[2] In a statement to investigators appellant admitted having had consensual sex with the victim, but ascribed the stabbing to his co-actor. He contended that the injury was an accident and occurred when he pushed Gore into the victim.

[3] The wording of Mil.R.Evid. 702 is considerably broader than the test required by *Frye v. United States*, 293 F. 1013 (D.C.Cir.1923). It has led some commentators to conclude that the rationale therein has not survived the promulgation of the rules. J. Weinstein & M. Berger, *Evidence*, para. 702[03] (1982); *see also United States v. Williams*, 583 F.2d 1194 (2d Cir.1978), *cert. denied*, 439 U.S. 1117, 99 S.Ct. 1025, 59 L.Ed.2d 77 (1979); *State v. Hall*, 297 N.W.2d 80 (Iowa 1980); *but see United States v. Brady*, 595 F.2d 359 (6th Cir.), *cert. denied*, 444 U.S. 862, 100 S.Ct. 129, 62 L.Ed.2d 84 (1979).

Mil.R.Evid. 702, Manual, *supra* (Change 5), and its progenitor, Federal Rule of Evidence 702, provide that any person whose testimony can "assist the trier of fact to understand the evidence or to determine a fact in issue" may testify as an expert. *See* Mil.R.Evid. 703; Fed.R.Evid. 703. This is a much lower threshold for determining whether a given person is an expert and requires only that the proffered witness have some specialized knowledge as a result of experience or education. No longer are parties to litigation "limited to [the use of] experts in the strictest sense of the word." *Soo Line R. Co. v. Fruehauf Corp.*, 547 F.2d 1365, 1377 (8th Cir. 1977). *See Dunn v. Sears, Roebuck & Co.*, 639 F.2d 1171 (5th Cir.1981), *aff'd on reconsideration*, 645 F.2d 511 (5th Cir.1981). The witness need not be "an outstanding practitioner," but only someone who can help the jury. *United States v. Barker*, 553 F.2d 1013, 1024 (6th Cir.1977). The questions thus posed to the military judge were whether the subject of Herndon's proffered testimony would be of assistance to the members and whether Herndon could competently provide such evidence.

The field of blood-flight analysis had its genesis in a monograph published by Professor Herbert MacDonell under a grant from the Law Enforcement Assistance Administration.[4] While there has been some criticism of this field, at least five state courts have admitted such testimony.[5] The analysis itself is grounded in established laws of physics and

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[4] MacDonell, *Flight Characteristics and Stain Patterns of Human Blood* (Nov. 1971).

[5] Some of the State courts that have admitted testimony regarding the field of blood-flight analysis are: *People v. Knox*, 459 N.E.2d 1077 (Ill.App.1984); *Farris v. State*, 670 P.2d 995 (Okla.Crim.App.1983); *State v. Melson*, 638 S.W.2d 342 (Tenn.1982); *State v. Graham*, 422 So.2d 123 (La.1982); and *State v. Hall, supra*. A fifth State court, the Supreme Judicial Court of Maine, has not rejected the evidence outright, but has reversed a conviction where the trial judge admitted the evidence saying that he should have inquired more deeply into the field and the qualifications of the particular witness. *State v. Philbrick*, 436 A.2d 844 (Me.1981). Prior to *People v. Knox, supra*, another Illinois appellate court had rejected the testimony of Professor MacDonell when proffered by the defendant in a criminal prosecution: *People v. Driver*, 379 N.E.2d 840 (Ill.App.1978).

common sense. It is certainly capable of quantification and, therefore, we conclude that there is a body of specialized knowledge which would permit a properly trained person to draw conclusions as to the source of the blood.

To be admitted, expert testimony need only be helpful, i.e., relevant. This is a matter within the discretion of the military judge. *See* Mil.R.Evid. 401 and 402. Examining the testimony of Special Agent Herndon, we believe that the military judge could determine that such evidence would "assist the trier of fact . . . to determine a fact in issue." *See United States v. Snipes*, 18 M.J. 172, 178 (C.M.A.1984); *see also United States v. Vik*, 655 F.2d 878 (8th Cir.1981). Consequently, he did not err in determining that the subject matter was admissible under Mil.R.Evid. 702.

The second question is whether Herndon could testify about the blood stains he examined. Again this is within the discretion of the military judge. Herndon was not Professor MacDonell, but he did have professional training and some experience, all of which could be of help to the court members in this case. *United States v. Barker, supra.* As a result, we conclude that the military judge did not abuse his discretion in allowing Herndon to testify both as to the blood spatters and his theory of the crime.[6]

In addition to the issues already addressed, we agreed to consider the following issue upon the petition briefs:

> WHETHER THE DENIAL OF THE APPELLANT'S REQUEST FOR AN EXAMINATION BY A FORENSIC PSYCHIATRIST OR FORENSIC PSYCHOLOGIST WAS ERROR WHICH SUBSTANTIALLY PREJUDICED HIS DEFENSE.

There can be no question that a military accused is entitled to have equal opportunity with the Government to obtain witnesses to assist him in his defense. Art. 46, UCMJ, 10 U.C.S. § 846. It follows, therefore, that an accused is entitled

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[6] Given the broad language of Mil.R.Evid. 702, we have no doubt that Sherlock Holmes could be eminently qualified as an expert in this field. According to himself, "It is simplicity itself, . . . so absurdly simple that an explanation is superfluous; and yet it may serve to define the limits of observation and of deduction. . . . So much is observation. The rest is deduction." "The Sign of Four," A. Doyle, *The Complete Sherlock Holmes* 91 (Doubleday & Company, Inc., 1930).

to have access to a qualified psychiatrist or psychologist for the purposes of presenting an insanity defense. Due process of law requires, as a minimum, "that when a defendant demonstrates to the trial judge that his sanity at the time of the offense is to be a significant factor at trial," the accused must have "access to a competent psychiatrist who will conduct an appropriate examination and assist in evaluation, preparation, and presentation of the defense. This is not to say, of course, that the indigent defendant has a constitutional right to choose a psychiatrist of his personal liking or to receive funds to hire his own." *Ake v. Oklahoma*, ____ U.S. ____, 105 S.Ct. 1087, 1097, 84 L.Ed.2d 53 (1985) (within the military, indigency is not of decisional importance; each accused is entitled to the same treatment without regard to his financial status).

Paragraph 121, Manual, *supra* (R.C.M. 706, Manual for Courts-Martial, United States, 1984), provides for a board of medical officers, who shall at the request of either the trial counsel, defense counsel, investigating officer, or the commanding officer considering the disposition of the charges, conduct an inquiry into the mental status of the accused. The clear import of paragraph 121 is that the accused shall have access to a board of officers who will make the requisite psychiatric evaluation. Such an evaluation of this appellant was conducted by a board of three certified psychiatrists.

At trial, appellant made a motion for the military judge to order an additional examination by either a board of officers, which included a forensic psychiatrist, or an evaluation by a single psychiatrist who was certified not only as a psychiatrist but also as a forensic psychiatrist. As a third alternative, appellant requested the services of a civilian forensic psychologist. The military judge denied the motion, holding "that the accused has no right to determine the composition of a psychiatric board" and that "there has been no showing of inadequacy of the evaluation."

We have carefully reviewed the record of trial and conclude that the military judge ruled correctly. There is no showing in the record that the sanity of appellant at the time of the offense was a significant factor at trial or that appellant was denied access to competent psychiatrists for the purpose of presenting an insanity defense. The only effect of the military judge's ruling was to overrule appellant's request for the services of a particular psychiatrist.

The decision of the United States Army Court of Military Review is affirmed.

EVERETT, Chief Judge (concurring):

I have expressed elsewhere my concern that purported "experts" may be allowed to express opinions for which there is no scientific basis. *See United States v. Snipes*, 18 M.J. 172, 180, (C.M.A.1984) (Everett, C.J., concurring in the result); *United States v. Moore*, 15 M.J. 354, 367(C.M.A.1983) (Everett, C.J., dissenting). However, whether I apply the *Frye** test or some more liberal test, my examination of this record convinces me that the military judge acted within his discretion in allowing blood-spatter testimony of Special Agent Herndon. As the principal opinion points out, there is ample precedent for receiving such evidence, which has an obvious basis in recognized laws of physics.

In a summation question, trial counsel virtually invited Herndon to go beyond the proper scope of his expertise. The prosecutor asked: "Analyzing all the evidence you have discussed here this morning, what is your *theory* as to how this incident occurred?" (Emphasis added). In my view, "theories" should be the subject of argument by counsel; and experts should only state their opinions and conclusions and testify whether the evidence is consistent with various hypotheses. However, because there was no objection to the form of this question and no motion to strike the answer, appellant has waived any complaint he might otherwise have. Accordingly, I concur.

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* *Frye v. United States*, 293 Fed. 1013 (D.C.Cir. 1923).

APPENDIX B

UNITED STATES ARMY COURT OF MILITARY REVIEW

Before SU-BROWN, YAWN and WALCZAK, Appellate Military Judges

CM 443380
HQ, 3d Inf Div
R.S. Arkow, Military Judge

UNITED STATES, APPELLEE

v.

SPECIALIST FOUR, JOSEPH N. BROWN, JR.,
(AKA KARIM ABDUL MUSTAFA) SSN 111-54-5669,
UNITED STATES ARMY, APPELLANT

Colonel William G. Eckhardt, JAGC, Colonel R. Rex Brookshire II, JAGC, Major Stephen R. Dooley, JAGC, Captain Frank J. DiGiammarino, JAGC, and Captain William T. Wilson, JAGC, were on the pleadings for appellant.

Colonel James Kucera, JAGC, Lieutenant Colonel Adrian J. Gravelle, JAGC, Lieutenant Colonel John T. Edwards, JAGC, Major Patrick M. Flachs, JAGC, and Captain Robert L. Swann, JAGC, were on the pleadings for appellee.

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23 NOV 1984

MEMORANDUM OPINION

WALCZAK, Judge:

Appellant was convicted by a general court-martial composed of officer members of premeditated murder, rape, forcible sodomy and felony murder, all occurring on 13 February 1982, and of aggravated assault and unlawful entry, both occurring on 13 November 1981. The charges against appellant

were referred for trial as a capital case. Appellant was sentenced to death and the convening authority approved the sentence.

Appellant contends, *inter alia*, that at his trial the military procedures for imposing capital punishment did not satisfy the requirements of the Eighth Amendment. We agree. *United States v. Matthews*, 16 M.J. 354 (CMA 1983). At the time of appellant's court-martial, neither the Uniform Code of Military Justice nor the Manual for Courts-Martial required the court to identify the specific aggravating factors upon which it relied when imposing the death penalty. The failure to require the court to identify aggravating factors rendered the sentencing procedures for imposing death in appellant's case defective. *Id.* at 380. Although ample aggravating factors existed in this case, appellant's sentence to death cannot be approved.

We also find, under the facts of this case, the offense of felony murder is multiplicious for findings with the offenses of premeditated murder, rape and forcible sodomy. *See United States v. Timberlake*, 18 M.J. 371, 375 (CMA 1984). Appellant suffered no prejudice as a result of this error.

The finding of guilty of the Additional Charge and its specification is set aside and that charge is dismissed. The remaining findings of guilty are affirmed. Upon consideration of the entire record, the Court substitutes a dishonorable discharge, confinement at hard labor for life,[1] and total forfeitures of all pay and allowances for appellant's sentence to death.

Senior Judge SU-BROWN and Judge YAWN concur.

FOR THE COURT:

/s/ WILLIAM S. FULTON, JR.
William S. Fulton, Jr.
Clerk of Court

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[1] *See* United States v. Russo, 11 U.S.C.M.A. 352, 29 C.M.R. 168 (1960) (death penalty converted to dishonorable discharge, confinement at hard labor for life); United States v. Matthews, 17 M.J. 978 (ACMR 1984) (confinement at hard labor for life substituted for sentence to death).

U.S. GOVERNMENT PRINTING OFFICE: 1986—159-862/21029

OPPOSITION

BRIEF

(2)

No. 86-143

Supreme Court, U.S.
FILED
OCT 14 1986
JOSEPH F. SPANIOL, JR.
CLERK

In the Supreme Court of the United States

OCTOBER TERM, 1986

KARIM ABDUL MUSTAFA
(a/k/a JOSEPH N. BROWN, JR.), PETITIONER

v.

UNITED STATES OF AMERICA

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF MILITARY APPEALS

BRIEF FOR THE UNITED STATES IN OPPOSITION

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QUESTION PRESENTED

Whether expert testimony regarding the characteristics of blood stains found at the crime scene was properly admitted into evidence.

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In the Supreme Court of the United States

OCTOBER TERM, 1986

No. 86-143

KARIM ABDUL MUSTAFA
(a/k/a JOSEPH N. BROWN, JR.), PETITIONER

v.

UNITED STATES OF AMERICA

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF MILITARY APPEALS

BRIEF FOR THE UNITED STATES IN OPPOSITION

OPINIONS BELOW

The opinion of the Court of Military Appeals (Pet. App. 1a-8a) is reported at 22 M.J. 165. The opinion of the Army Court of Military Review (Pet. App. 9a-10a) is unreported.

JURISDICTION

The judgment of the Court of Military Appeals was entered on June 2, 1986. The petition for a writ of certiorari was filed on July 31, 1986. The jurisdiction of this Court is invoked under 28 U.S.C. (Supp. II) 1259(3).

STATEMENT

Petitioner, a member of the United States Army, was tried by a general court-martial in Wuerzburg, Germany. He was convicted of premeditated murder, felony murder, rape, forcible sodomy, aggravated assault, and unlawful entry, in violation of Articles 118, 120, 125, 128, and 134 of the Uniform Code of Military Justice (UCMJ), 10 U.S.C. 918, 920, 925, 928, and 934, and was sentenced to death. The convening authority reviewed the case and approved the sentence. The Army Court of Military Review dismissed petitioner's felony-murder conviction, but affirmed the remaining findings of guilty. In place of petitioner's capital sentence, the court substituted a dishonorable discharge, confinement for life, and total forfeitures of all pay and allowances (Pet. App. 9a-10a). The Court of Military Appeals affirmed (Pet. App. 1a-8a).

1. On the morning of February 13, 1982, the nude body of an 18-year-old German female was discovered in a stairwell in an American military housing area of Aschaffenburg, Germany (Tr. 220-221, 411-412; GX 48). The victim had been sexually assaulted and repeatedly stabbed (Tr. 271-272, 276, 283). Petitioner was arrested three days later by special agents of the Army Criminal Investigation Division (CID). Petitioner admitted raping and sodomizing the victim on the night in question, but he denied stabbing her; he implicated his companion, Private Roy Gore, in the killing (Tr. 327, 331, 339; GX 34).[1]

[1] According to petitioner, Gore held a knife to the victim's chest when they initially accosted her (GX 34). During the rape, Gore accidently cut petitioner on the leg (*ibid.*). Petitioner responded by pushing Gore (who was sitting on the victim's chest at the time), at which time petitioner heard the victim yell something that sounded like "Erp" (*ibid.*). Petitioner surmised that the victim may have been stabbed at that time (*ibid.*). He did not explain, however, how the victim received the other fifteen stab wounds that were found in her body.

2. a. At trial CID Special Agent Herndon was called as a witness by the Government to testify concerning his observations of bloodstains that were discovered at the crime scene (Tr. 233-256).[2] Testimony about Agent Herndon's qualifications and specialized training in the area of "blood spatter" analysis were presented to the trial judge. Agent Herndon testified that he attended a one-week seminar on the subject of blood spatter analysis (Tr. 234, 236). The course involved a number of experiments that used blood to study the different bloodstain patterns resulting from variations in the speed and angle of impact of blood striking a surface (Tr. 234-235, 239). Agent Herndon also testified that he had received training on the subject while attending the CID school and that he also relied on his practical experience as an investigator (Tr. 235). Agent Herndon also related a prior instance in which he used the same type of analysis successfully to solve a robbery (Tr. 243-244). Thereafter, he was subjected to extensive cross-examination concerning his qualifications as an expert (Tr. 236-242).[3] Petitioner objected only to Agent Hern-

[2] In addition to his testimony on the flight patterns of blood, Agent Herndon testified concerning his participation in petitioner's apprehension and subsequent confession (Tr. 326-359; GX 34). Agent Herndon also identified for the court a sketch of the crime scene prepared by petitioner (Tr. 330-331; GX 35).

[3] On cross-examination Agent Herndon acknowledged that he held no educational degrees relating to the subject of

don's "qualification • • • as an expert" (Tr. 242), not to the subject matter of his testimony, and Agent Herndon was permitted to testify as an expert (Tr. 244-245).[4]

b. Using a chart of the crime scene (GX 30), Agent Herndon observed that the victim was most likely initially accosted and injured on a street near the place where her body was found. He based that opinion on bloodstains and disturbances to a coal-like material used to deice the roadway. Based on a trail of blood leading to the nearby stairwell where the body was found and on bloodstains found on the steps and walls of the stairwell, Agent Herndon concluded that the victim was led to the stairwell and assaulted on the way down the stairs (Tr. 246-247, 253-254).[5] Referring to a photograph showing the victim lying at the bottom of the stairwell (GX 10), Agent Herndon testified that the victim was further injured at the bottom of the stairwell, but was still able to move about. According to Agent Herndon,

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bloodstain analysis and had not written on the topic (Tr. 236-237). When asked if he considered himself an expert in the field, Agent Herndon replied, "That's a hard question to answer" (Tr. 241).

[4] The military judge informed the court members that he would allow the witness to testify "with regard to his experience and training in this area," and that it was for the members "to evaluate and assess the weight to be given his testimony based on his experience and training" (Tr. 245).

[5] Agent Herndon concluded from the large number of small diameter bloodstains on two steps and the adjacent wall that the victim had been further injured at that point (Tr. 248). Agent Herndon believed that the bloodstains had been produced by a "medium-velocity" impact as opposed to a "high-velocity" impact, such as a gunshot wound, which results in a spray of blood (Tr. 249).

the victim was stabbed repeatedly while she lay in the position in which the body was discovered (Tr. 249-254). Based on the three large pools of blood at the bottom of the stairs, Agent Herndon concluded that the victim's body had been no more than two feet above the bottom step at the time the blood pools were formed (Tr. 250). A bloody palm print found on the underside of the nearby handrail led Agent Herndon to point out that "somebody" had reached up for the railing (Tr. 252). Agent Herndon also identified several "cast-off" type bloodstains on the stairwell wall (Tr. 251). He explained that the stains were caused by blood being released by a bloodstained object as it was raised (*ibid.*). The bloodstains on the wall behind the victim, coupled with the injuries to her back, led Agent Herndon to conclude that the victim had been repeatedly stabbed while she lay in the position in which she was found (Tr. 251, 253-254). Agent Herndon pointed out several palm prints and a footprint on the victim's body and testified that impressions of what appeared to be tennis shoe soles were found in the pool of blood where the victim lay (Tr. 252-253).

Petitioner's cross-examination of Agent Herndon was brief and did not address the substance of Agent Herndon's testimony (Tr. 255-256). Notably, defense counsel did not object when Agent Herndon was asked to state his theory of how the murder occurred (Tr. 253-254). The court members had no questions of Agent Herndon concerning his observations and conclusions (Tr. 256).[6]

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[6] Mil. R. Evid. 614 allows court-martial members to question witnesses subject to objection by the respective parties and a ruling by the military judge on the propriety of the questions.

c. The prosecution introduced a variety of other types of evidence at trial that accorded with Agent Herndon's description of the murder.[7] Finally, petitioner's confession to the rape and sodomy of the victim and his other statements,[8] physical evidence, and the testimony of several witnesses[9] directly

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[7] Dr. Schulz, a forensic pathologist, testified that the stab wounds to the victim's back were inflicted while she lay in the position that her body was found (Tr. 272-274). Dr. Schulz further concluded that the victim had been undressed prior to the infliction of the fatal wounds (because there were no cuts in her clothing) and was still alive when she was stabbed in the back (Tr. 270-272). Dr. Schulz stated that the stab wound to the heart would not have been instantly fatal and that the victim would still have been capable of movement (Tr. 278, 281). Examination of the wounds revealed that the wounds were inflicted from different angles, sometimes by a downward stabbing motion, sometimes by an upward motion (Tr. 281). Dr. Schulz concluded that the blood trail leading from the street to the stairwell resulted from wounds to the victim's hands inflicted during the victim's efforts to defend herself (Tr. 276-277).

[8] Petitioner's confession to the rape and sodomy of the victim, his sketch of the crime scene, and his statement that Gore used a knife during the commission of the offenses, mirrored, in large part, the government's theory of the case (GXs 34, 35). After he was arrested and questioned about the crime, petitioner told a fellow servicemember (Tr. 407): "Well, I guess you heard what has happened to me, but somehow or another I'll get out of it. * * * For raping a person you get life. For killing a person you'll get death. I guess I'll end up getting both life and death."

[9] Private Tyrone Robinson, a roommate of Gore's, testified that on the night of the murder, petitioner came into his barracks room and said: "Gore, that bitch is crazy. She tried to kill me. I think I killed her" (Tr. 300). Robinson observed that petitioner had "big spots" of blood on his underwear and spots of dried blood on his face (Tr. 300-301, 303). Petitioner asked Gore for some band aids and again said, "I think I killed her" (Tr. 300-301). Shortly thereafter, Robinson saw petitioner leave his room carrying a pair of tennis shoes and a bottle of bleach and run down the stairs (a laundry room was located in the barracks basement) (Tr. 301-302). Specialist Anthony Baker, another roommate of Gore's, testified that on the night in question, petitioner came into the room and spoke to Gore (Tr. 321). Baker overheard petitioner tell Gore, "She cut me and I had to —" (*ibid.*). Petitioner then began to whisper, and Baker was unable to hear the rest of the conversation (*ibid.*). Baker also saw dark spots on petitioner's underwear (Tr. 322).

linked petitioner to the murder. Petitioner did not offer a defense at trial to the charges of rape and sodomy; his defense at trial to the murder charge was that Gore killed the victim (Tr. 489-491, 496, 501-502).

ARGUMENT

Petitioner claims that the trial court erred in admitting expert testimony regarding the blood stains found at the murder scene, because that testimony did not satisfy the requirements for admission under the test adopted in *United States* v. *Frye*, 293 F. 1013 (D.C. Cir. 1923). The decision below is correct, and it does not conflict with any decision of this Court or of any other court of appeals. Accordingly, review by this Court is not warranted.

1. It is well established that a "trial judge has broad discretion in the matter of the admission or exclusion of expert evidence, and his action is to be sustained unless manifestly erroneous." *Salem* v. *United States*, 370 U.S. 31, 35 (1962); accord *Hamling* v. *United States*, 418 U.S. 87, 108 (1974); see also *United States* v. *Abel*, 469 U.S. 45, 54 (1984). Military Rule of Evidence 702 provides that "[i]f

scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise." Agent Herndon's testimony was clearly admissible under any natural reading of the Rule. His knowledge was of a "specialized" nature, it was of "assist[ance]" to the trier of fact, and he was "qualified as an expert" by the trial court. The Court of Military Appeals' conclusion that the admission of Agent Herndon's testimony was within the trial judge's discretion (Pet. App. 6a) is fully consistent with the terms of the rule.

There is also no realistic possibility that Agent Herndon's testimony could have prejudiced petitioner in the slightest. Agent Herndon's testimony was a minor part of the trial. His testimony covered only ten pages (Tr. 245-254) of a trial that lasted several days, and the prosecutor did not refer to his testimony during the remainder of the trial or in his closing argument (see Tr. 502-519).[10] Agent Herndon also did not testify that petitioner committed the crime; rather, he simply described the likely sequence of events on the night of the murder. There was no dispute at trial on this issue, as defense counsel admitted during her closing argument (Tr. 487). The photographs of the victim and the murder scene (GXs 10, 14-16, 18-19, 22-23; see also GX 30),

[10] Defense counsel referred to Agent Herndon's testimony in her closing argument (Tr. 488). She summarily dismissed Agent Herndon's testimony about the blood stains, noting that it was not at all helpful in determining who actually committed the murder (*ibid.*).

the testimony of the forensic pathologist who performed the autopsy on the victim and whose trial testimony the defense did not contest (Tr. 269-279, 282-283),[11] petitioner's own sketch of the crime scene (GX 35), and his detailed confession to the sex offenses (GX 34), established beyond doubt that the victim was initially accosted on the street and was then forced down the stairwell, where she was killed.

In light of petitioner's confession (GX 34) and his sketch of the crime scene (GX 35), the only issue at trial was whether petitioner or Private Gore actually murdered the victim. The most probative evidence on that issue was the testimony of Private Robinson, who twice overheard petitioner say "I think I killed her" and who also saw large blood stains on petitioner's underwear and spots of blood on petitioner's face (Tr. 300-301, 303). Additional evidence on that issue included an incriminating statement made by petitioner within earshot of Specialist Baker, as well as other physical evidence unrelated to Agent Herndon's testimony. There is, in sum, no realistic possibility that Agent Herndon's testimony could have influenced the verdict against petitioner.

2. Petitioner argues, however, that review by this Court is necessary to resolve a conflict among the courts of appeals on the continued validity of the *Frye* standard for the admission of novel scientific testimony. In *Frye*, the court held that polygraph evidence was inadmissible. The court stated that "[t]he courts will go a long way in admitting ex-

[11] See Tr. 489 (referring to Dr. Schulz: "The defense does not contest his evidence. He is obviously a very experienced man.").

pert testimony deduced from a well-recognized scientific principle or discovery," but it added that "the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs." 293 F. at 1014. From that passage arose the requirement that novel scientific evidence be generally accepted in its particular field before it can be admitted into evidence. While that rule has been applied somewhat differently in different circuits, petitioner's claim of conflict does not warrant review by this Court, for several reasons.

First, there is no conflict among the circuits on the question whether expert testimony may be admitted on blood-flight characteristics. The only court of appeals decision cited by petitioner that considered this type of evidence did not address the question whether such expert testimony was admissible under the federal rules. The court held only that the admission of such testimony violates no constitutional right of a defendant. *Hall* v. *Iowa*, 705 F.2d 283, 287 (8th Cir.), cert. denied, 464 U.S. 934 (1983). Moreover, even if the question presented by petitioner would warrant review by this Court in a proper case,[12] this is not an appropriate vehicle to resolve that question.

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[12] As we explained in our brief in opposition (at 4-9) in *Ferri* v. *United States*, cert. denied, No. 85-6536 (June 10, 1986) (a copy of which has been provided to petitioner's counsel), the different standards adopted by the courts of appeals in deciding whether to accept novel scientific evidence have not led to material differences in the outcome of the decided cases. The courts of appeals have all emphasized that the trial judge must be afforded discretion on this matter, and that a showing of reliability and a weighing of the risk of confusion and prejudice is necessary in each case. In addition, there is a substantial overlap in the approaches of the various courts of appeals to the issue whether expert evidence must satisfy the *Frye* test before being admitted.

The premise of petitioner's argument is that the agent's testimony involved novel scientific evidence, but that premise is wrong. As the court below explained (Pet. App. 5a-6a), blood-flight analysis is "grounded in established laws of physics and common sense" and "is certainly capable of quantification." In fact, petitioner concedes (Pet. 8) that the principle underlying blood-flight testimony is scientifically valid. That concession is dispositive in this case, because the underlying theory of blood-flight analysis is the only scientific aspect of Agent Herndon's testimony. Although petitioner claims (Pet. 8-12) that the process of reconstructing a crime scene from blood spatters has not been scientifically verified, Agent Herndon's description of the sequence of events involved nothing more than the kind of ordinary deductions that are performed by police on a daily basis. His testimony itself makes that clear.

Agent Herndon's testimony (Tr. 245-254) consisted mostly of ordinary observations, combined with the terminology he learned during his training. It required no arcane scientific expertise for Agent Herndon to conclude that the trail of blood that began near the street and ended where the victim's body was discovered indicated that the victim had initially been accosted and wounded near the street and then led to the stairwell (Tr. 246-247, 253). Likewise, his conclusion that somebody reached for the railing in the stairwell where a bloody palm print was found (Tr. 252) is hardly speculative, and his opinion that a further struggle occurred on the way down the stairs is the only logical explanation for the blood on the steps and walls of the stairwell (Tr. 248). That

testimony, which was based on a visual observation of the scene, was not "of such a complex nature as to require a more detailed scientific foundation" or "a foundation in the science of physics" (*People* v. *Knox*, 121 Ill. App. 3d 579, 584, 459 N.E.2d 1077, 1081 (1984)), because "a layman or a member of the jury, after hearing and seeing a description of the blood stains, using common knowledge and experience, could have arrived at the same conclusion [as the witness]" (*Jordan* v. *State*, 464 So. 2d 475, 486 (Miss. 1985), vacated and remanded on other grounds, No. 84-1783 (May 5, 1986)). See also *State* v. *Hall*, 297 N.W.2d 80, 85-86 (Iowa 1980), cert. denied, 450 U.S. 927 (1981) (applying a modified *Frye* standard, the court held that an expert could testify as to events of the crime based on blood spatter evidence, because of the uncomplicated subject matter of his testimony).[12]

To the extent that petitioner faults the trial judge for not adequately determining, in advance of Agent Herndon's testimony, that his opinion was "scientifically" valid, petitioner has waived that claim. Petitioner was given the opportunity to question Agent Herndon as to whether the agent's proposed testimony had been scientifically verified (Tr. 234-242), but he did not do so. Petitioner did not object

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[12] Other courts that recognize the continued validity of *Frye* or apply a modified *Frye* standard have refused to exclude similar evidence that involves only a visual comparison, rather than some intermediate mechanical steps, and is based on accepted scientific principles. See, *e.g.*, *Commonwealth* v. *Cifizzari*, 397 Mass. 560, 492 N.E.2d 357, 363-364 (1986) (bite mark evidence) (collecting cases); *State* v. *Bullard*, 312 N.C. 129, 322 S.E.2d 370, 379-384 (1984) (footprint analysis); cf. *People* v. *Columbo*, 118 Ill. App. 3d 882, 455 N.E.2d 733, 789-790 (1983), cert. denied, 467 U.S. 1208 (1984) (handprint impression).

to the admission of Agent Herndon's testimony on that ground; he claimed only that the agent was not qualified to testify as an expert (Tr. 242). Petitioner therefore cannot fault the trial judge for admitting Agent Herndon's testimony without first determining whether the agent's proposed explanation of the sequence of events at the murder scene had a scientific foundation.

CONCLUSION

The petition for writ of certiorari should be denied.

Respectfully submitted.

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OPINION

SUPREME COURT OF THE UNITED STATES

KARIM ABDUL MUSTAFA, AKA JOSEPH N. BROWN, JR. *v.* UNITED STATES

ON PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF MILITARY APPEALS

No. 86-143. Decided November 10, 1986

The petition for a writ of certiorari is denied.

JUSTICE WHITE, with whom JUSTICE BRENNAN joins, dissenting.

In this case the trial court admitted, over petitioner's objection, the testimony of a purported expert on blood spatter techniques. On appeal, the Court of Military Appeals held that the testimony in question was admissible under Military Rule of Evidence 702, which is worded identically to Federal Rule of Evidence 702. The court held that the so-called *Frye* test for determining the admissibility of expert testimony, *see Frye* v. *United States*, 293 F. 1013, 1014 (CADC 1923), was superseded by the 1975 enactment of the Federal Rules of Evidence. The court described Military Rule 702 as establishing a much lower threshold than *Frye* for determining whether a given person is an expert. This conclusion is supported by decisions interpreting Federal Rule of Evidence 702 as establishing a more flexible standard of admissibility than the *Frye* test. *See, e. g., United States* v. *Downing*, 753 F. 2d 1224 (CA3 1985). Other courts, however, have interpreted Federal Rule of Evidence 702 as incorporating the *Frye* test. *Barrel of Fun, Inc.* v. *State Farm Fire and Casualty Insurance Co.*, 739 F. 2d 1028, 1031, n. 9 (CA5 1984); *United States* v. *McBride*, 786 F. 2d 45, 49 (CA2 1986). I would grant certiorari to resolve this conflict on an obviously recurring and important issue.